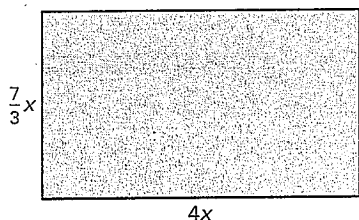


# Chapter Test B

For use after Chapter 1

Evaluate the expression for the given value of the variable.

1.  $4.25q$  when  $q = 6.2$
2.  $\frac{16.8}{x}$  when  $x = 2$
3. If you are driving at a constant speed of 65 miles per hour, how long will it take you to travel 260 miles?
4. The area of a rectangle is the product of its base and height. Find the area of the rectangle below when  $x = 6$  ft.



Evaluate the expression for the given value of the variable.

5.  $3^n$  when  $n = 4$
6.  $(6x)^4$  when  $x = 2$
7.  $8 + 5a^2$  when  $a = 7$
8.  $64 - \frac{32}{b}$  when  $b = 4$

Evaluate the expression for the given values of the variables.

9.  $x + y^2$  when  $x = 5$  and  $y = 9$
10.  $(a - b)^4$  when  $a = 10$  and  $b = 6$
11. A storage container is 22 inches long, 22 inches wide, and 24 inches deep. The volume of the container is the product of its length, width, and height. What is the volume of the container?

Evaluate the expression.

12.  $49 \div 7 + 3 \cdot 6$
13.  $4[(29 - 12) + 10]$
14.  $[44 \div (10 - 8)^2] + 7$
15.  $\frac{1}{2} \cdot 18 - 3^2$

Check whether the given number is a solution of the equation or inequality.

16.  $16x + 3 = 29 - 3x$ ; 2
17.  $10x - 4 \leq 20$ ; 5
18. If you invested \$250 in a bank account for 2 years and received \$7.50 in simple interest, what was the annual interest rate for the account?

## Answers

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_
18. \_\_\_\_\_

# Chapter Test B

For use after Chapter 1

Write the verbal phrase as an algebraic expression. Use  $x$  for the variable in your expression.

19. A number increased by  $\frac{1}{2}$       20. A number multiplied by  $\frac{2}{3}$

Write the verbal sentence as an equation or an inequality.

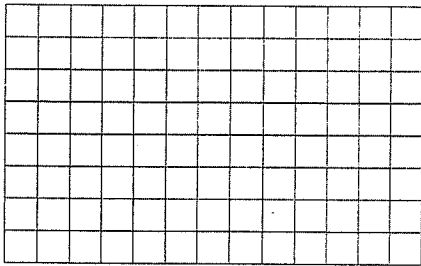
21. The third power of two is eight.

Write an equation or inequality to model the situation.

22. Four hundred dollars is less than or equal to the product of \$32 and the number  $p$  of passes to an amusement park.

23. The table shows the price of gasoline per gallon for a four-month period. Make a line graph of the data.

Month	March	April	May	June
Price of gas (per gallon)	\$1.29	\$1.09	\$1.19	\$1.15



Make an input-output table for the function. Use 1, 1.5, 2, and 3 as the domain.

24.  $y = 2x^2 + 3.1$

Input	Output

25.  $y = \frac{6}{x} - 0.5$

Input	Output

19. \_\_\_\_\_

20. \_\_\_\_\_

21. \_\_\_\_\_

22. \_\_\_\_\_

23. Use grid at left.

24. Use table at left.

25. Use table at left.